

BACKGROUND OF THE INVENTION

1. Field of the invention.

The invention is a safety device which protects the occupant or passenger of an emergency vehicle as they alight from that vehicle.

5 Drivers and passengers of emergency vehicles are often called upon to respond to situations which require their immediate attention. In responding to the demands of their job, these individuals often exit their vehicle after parking it on the shoulder of a road. Safety devices have been introduced which draw attention to an opening door. These devices
10 are seldom seen on emergency vehicles which must respond to hostile situations, because the very devices intended to protect the police officers or other responding individuals call attention to their presence, often endangering those individuals and subjecting them to harm from a hostile perpetrator.

15 This invention provides automatic protection when the responding emergency personnel want to be seen, and protects them from inadvertent disclosure when they do not wish to be seen.

2. Description of Prior Art.

Previous inventions have solved the problem of how to turn on a
20 warning light on the side face of a vehicle's door, when that door is

opened. Some inventions have taught how such an indicator light might blink on and off, mimicking the turn signal of the vehicle.

United States patent 2,844,810 disclosed an invention which would call attention to an open door by selectively illuminating one of two indicator bulbs mounted in a housing in the vehicle door. The invention also disclosed a reflective strip, mounted on the side face of the door, which would reflect any illumination and call attention to the open door. The invention operated on a switch which automatically opened whenever the vehicle door was opened, in the same manner that dome lights are illuminated in modern vehicles today.

United States patent 4,972,173 disclosed an invention intended to illuminate the zone between the vehicle and the open door, while calling attention to the open door. This illumination was intended to assist the occupant as they exited the vehicle, while having a second purpose of always drawing attention to the open door.

United States Patent 5,193,895 disclosed an invention which is activated when a vehicle door is opened, and which features a low profile strip of light emitting diodes as the source of illumination. Like the inventions that came before it, this invention is automatically activated by a switch that is activated when the door is opened.

SUMMARY OF THE INVENTION

This invention provides a safety hazard light, located in that portion of the door that is only visible when the door is opened. The hazard light operates to provide a bright strobe effect whenever the overhead

5 emergency lights are being operated. The hazard light operates in steady fashion when the overhead emergency lights are not operating. The hazard light is disabled, and will not operate, whenever the vehicle is operating in a "silent" mode, such mode disabling the operation of the dome light in the vehicle, as well as any other indicators that would draw attention to the presence of the vehicle.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to figure 1, the invention is shown from a top view of an emergency vehicle 1 equipped with emergency lights 2 on the roof of said vehicle. In this operating mode, the illumination devices 3 in the shell of the door 4 blink on and off at a frequency that approximates that of the rotating emergency lights that are activated on the roof of the vehicle.

Referring to figure 2, the invention is shown from a top view of an emergency vehicle 1 equipped with emergency lights 2 on the roof of said vehicle. In this operating mode, the illumination devices 3 in the shell of the door 4 illuminate in a steady fashion when the headlights 5 are activated, and when the dome lights in the vehicle are not disabled.

Referring to figure 3, the invention is shown in a perspective view, with the illumination devices 3 shown in the shell of the door 4.

Referring to figure 4, the circuit is shown with an electrical ground 6 attached to a switch 7 that is electrically open whenever the vehicle door 4 is closed, and which is electrically closed when the vehicle door 4 is opened as in the figure. A double pole electrical switch 8 enables the left 9 and right 10 headlights in the vehicle, when in the on position as shown. The other pole of the double pole electrical switch 8 is connected to the illumination device 11 contained in the shell of the door 4, so that

when the headlights 9, 10 are illuminated and the door 4 is open, current flows through the illuminating device 11 to ground through the switch 7. The power source for the headlights is the power supply to the vehicle 12. The power source to the illuminating device 11 is provided by a second double pole switch 13 which is fed with the power supply to the vehicle 14, which supplies the illumination device 11 through switch 8 on one pole, and which supplies the dome light 15, connected to ground 6 through the switch 7. The illumination device will illuminate in a solid fashion when the door 4 is in an open position, creating an electrical closed switch 7, when the headlights 9, 10 are on, and when the dome light 15 is not disabled.

A second door 16 controls a switch configured as switch 7, denoted as switch 17, enabling an illumination device 18 contained in door 16. One side of the switch 17 is tied to ground 6. A plurality of these networks and illumination devices can be configured in a vehicle, so that each door is equipped with its own illumination device enabled when the door is opened and the conditions described in the previous paragraph are met.

A double pole switch supplies power to the overhead emergency lights 20, 21 and to the mechanism 22 for rotating these lights. One side of this switch is tied to the electrical ground 6 of the vehicle. When in

the on position, power 14 is supplied through a second pole to a device 23 which alternately provides power and blocks power, so as to create a series of pulses of illumination through an illumination device 24 located in the shell of the door 4. The circuit is only completed when the door 4 is

5 open.

A similar network routes power through a second independent device which provides pulses of power 25 which flow through an illumination device located in the shell of a second door 16, and then to ground through switch 17. The blinking illumination occurs whenever the door is open and the emergency overhead lights are enabled.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows the invention from a top view, with the emergency overhead lights enabled and the invention enabled with a pulsing warning indication.

5 Figure 2 shows the invention from a top view, with the headlights on, the emergency overhead lights disabled, and the invention enabled with a steady warning indication.

Figure 3 shows a perspective of the illumination devices placed in the shell of the left front door of an emergency vehicle.

10 Figure 4 shows the electrical circuit which enables the invention to selectively provide warning illumination when the door is opened, and which allows the warning illumination to be disabled when the overhead dome light is disabled.